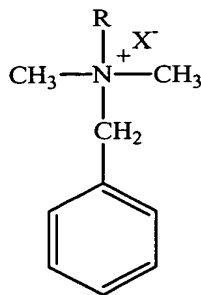


We claim:

1. A hyaluronic acid complex suitable for incorporation with tissue scaffolds comprising a hydrophobic polymer and that are suitable for use in repair and/or regeneration of musculoskeletal tissue, said hyaluronic acid complex comprising a complex of a monovalent alkali metal salt of hyaluronic acid and a tetra alkyl ammonium halide, wherein said hyaluronic acid complex is substantially insoluble in water at room temperature, yet soluble in mixtures of organic and aqueous solvents in which said hydrophobic polymer is soluble.

2. The hyaluronic acid complex of claim 1 wherein said monovalent alkali metal salt is selected from the group consisting of sodium hyaluronate and potassium hyaluronate.

3. The hyaluronic acid complex of claim 2 wherein said tetra alkyl ammonium halide is represented by the formula



where R is C₈H₁₇ to C₁₈H₃₇ and X is Cl or Br.

4. The hyaluronic acid complex of claim 3 wherein the molar ratio of sodium hyaluronate to tetra alkyl ammonium halide is between about 10:1 and about 1:10.

5. The hyaluronic acid complex of claim 4 wherein said tetra alkyl ammonium halide is selected from the group consisting of tetrabutylammonium bromide, cetyltrimethylammonium bromide, benzalkonium chloride, stearyltrimethylammonium chloride, 3-
5 (benzyltrimethylammonio)propanesulfonate, benzyltrimethyldecylammonium chloride, benzyltrimethyldodecylammonium bromide, benzyltrimethyldodecylammonium chloride, benzyltrimethylhexadecylammonium chloride, benzyltrimethyl(2-hydroxyethyl)ammonium chloride, benzyltrimethyltetradecylammonium chloride and benzethonium chloride.

10 6. The hyaluronic acid complex of claim 1 comprising sodium hyaluronate and benzalkonium chloride in a molar ratio of from about 10:1 to 1:10.

15 7. The hyaluronic acid complex of claim 1 wherein said complex is soluble in a mixture of from about 50 to about 60 weight percent 1,4-dioxane with from about 50 to about 40 weight percent water.